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RESUME OF ANTHONY ELLER

Anthony Eller was graduated from Phillips Academy in Andover, Massachusetts in 1956. The next four years he studied Engineering and Applied Physics at Harvard College where he received a Bachelor of Arts degree cum laude in 1960. That same year he entered the Department of Electrical Engineering at the University of Rochester to study acoustics under Professor H. G. Flynn. Mr. Eller received his Master of Science degree from the University of Rochester in 1963. His Master's thesis concerned the effects of a sound field on the diffusion of gas to or from a gas bubble in a liquid. Part of this work has been published in the Journal of the Acoustical Society of America. Mr. Eller received the Doctor of Philosophy degree from the University of Rochester in 1966. His dissertation was a study of the equilibrium properties and dynamics of a translating cavity in a liquid, and part of this work has been published in the Journal of Fluid Mechanics.



From July 1966 to June 1969 he held the position of Research Fellow in Acoustics at Harvard's Acoustics Research Laboratory under the direction of Professor F. V. Hunt. His work at Harvard consisted of theoretical and experimental research in the field of acoustics cavitation, including such topics as the translational forces exerted on bubbles by a sound field and the mechanism by which bubbles in a sound field can generate subharmonics of the driving frequency.

In September 1969 he joined the faculty of the Naval Postgraduate School in Monterey, California, as Assistant Professor in the Department of Physics.

PUBLICATIONS OF A. I. ELLER

OPEN LITERATURE

Books; published paper, notes, letters.

1. Rectified Diffusion During Nonlinear Pulsations of Cavitation Bubbles
with H. G. Flynn
J. Acoust. Soc. Am., 37, 493-503 (1965) P
2. The Equilibrium and Stability of a Translating Cavity in a Liquid
with H. G. Flynn
J. Fluid Mech., 30, 785-803 (1967) P
3. Force on a Bubble in a Standing Acoustic Wave
J. Acoust. Soc. Am., 43, 170-171 (L) (1968) P
4. Generation of Subharmonics of Order One-Half by Bubbles in a Sound Field
with H. G. Flynn
J. Acoust. Soc. Am., 46, 722-727 (1969) P
5. Growth of Bubbles by Rectified Diffusion
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7. Damping Constants of Pulsating Bubbles
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8. Motion of Bubbles in a Stationary Sound Field
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J. Acoust. Soc. Am., 48(1), 181-189 (1970) P
9. Driven Nonlinear Oscillations of a String
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10. Bubble Growth by Diffusion in an 11-kHz Sound Field
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11. Fractional-Harmonic Frequency Pairs in Nonlinear Systems
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